EXPLANATION OF THE PLATES.

PLATE I.

- Fig. 1. Pleistacantha sancti-johannis (p. 24), male individual, natural size. 1 a. Inferior view of buccal, orbital, and antennal region of the same. \times 3 diameters.
 - 1 b. Lateral view of rostrum. \times 3 diameters.
 - 1 c. Outer view of hand of the same. \times 3 diameters.
 - 1 d. Postabdomen of the same. \times 3 diameters.
 - 2. Hyastenus (Chorilia) japonicus (p. 27), male individual, dorsal view, natural size.
 - 2a. Orbital and antennal region of the same. $\times 2$ diameters.
 - 2 b. Postabdomen of the same. \times 2 diameters.

PLATE II.

- Fig. 1. Doclea orientalis (p. 28), female individual, natural size.
 - 1 a. Inferior view of orbital and antennal region of the same. \times 3 diameters.
 - 2. Heteroplax ? nitidus (p. 39), female individual. \times 2 diameters.
 - 2 a. Inferior view of frontal, orbital, and antennal region of the same, further magnified.
 - 2 b. Outer view of hand of the same. \times 4 diameters.
 - 3. Heterograpsus longitarsis (p. 37), male individual, natural size.
 - 3a. Outer view of hand of the same. $\times 3$ diameters.
 - 4. Pseudophilyra tridentata (p. 41), male individual. \times 3 diameters.
 - 4 a. Outer view of hand of the same. \times 2 diameters.
 - 5. Cryptocnemus pentagonus, Stimpson (p. 43), carapace of male individual. \times 3 diameters.
 - 6. Paratymolus pubescens (p. 45), female individual. \times 3 diameters.
 - 6 a. Inferior view of buccal, antennal, and orbital region of the same. $\times 8$ diameters.
 - 6 b. Lateral view of carapace of the same. \times 3 diameters.

PLATE III.

- Fig. 1. Eupagurus cavimanus (p. 48), male individual. $\times 1\frac{1}{2}$ diameter. 2. Pomutocheles jeffreysii (p. 49), male individual, dorsal view. × 4 dia
 - meters.
 - 2a. Lateral view of the same. $\times 4$ diameters.
 - 2b. Fourth cephalothoracic leg of the same, greatly magnified.
 - 2 c. Fifth cephalothoracic leg, greatly magnified.
 - 2 d. Terminal segment and nropoda, greatly magnified.
 - 3. Heterocuma sarsi (p. 58), male individual. × 3 diameters.
 - 3 a. Front of cephalothorax, dorsal view, further magnified.
 - 3 b. Second maxilliped, greatly magnified.
 - 3 c. Third maxilliped of the same, greatly magnified.

 - 3 d. Leg of the first pair, greatly magnified. 3 e. Terminal segment and uropoda, greatly magnified.
- 4. A few Remarks on Mr. Elliot's paper "On the Fruit-Pigeons of the Genus Ptilopus." By T. SALVADORI, C.M.Z.S.

[Received November 23, 1878.]

My friend Mr. Elliot, in his paper "On the Fruit-Pigeons of the Genus Ptilopus" (P. Z. S. 1878, pp. 500, 525) has requested that his conclusions should not be rejected or condemned until after the examination of materials at least approximating somewhat to that which he has consulted. I hope that he will allow that as regards Moluccan and Papuan species I have seen a good deal more than he has, and that I am not liable to the reproach of the Greek sculptor to the cobbler of Athens, "*Ne sutor ultra crepidam.*" Just for this reason I shall confine myself to some remarks on the Papuan and Moluccan species, leaving to somebody else to test Mr. Elliot's conclusions as to the species from other localities.

I shall follow Mr. Elliot's order.

18. PTILOPUS XANTHOGASTER.

I do not find among the synonyms the following:—*Ptilopus aurantiiventris*, Rosenb. Tijdschr. Ned. Ind. xxix. p. 144 (1867); id. Reis. naar Zuidoostereil. pp. 81, 86 (1867).

The specimens from Lettie Island are smaller, with the head and the neck of a darker and less pure ashy white. Those from Khoor are larger, with the neck whiter.

In the British Museum I examined a specimen marked Marianne Islands (!), smaller, but otherwise not different from those of the Ké Islands.

2]. PTILOPUS SUPERBUS.

I have examined the type of *Lamprotreron porphyrostictus*, Gould; and there is not the least doubt that it is a female of this species.

As to the *habitat* of this species and of many others, I must make the remark that it is a pity Mr. Elliot has not mentioned the islands by groups; by mixing together Moluccan and Papuan islands he makes it very difficult to the reader to form a clear idea of the distribution of the species.

This bird has been found not only in the northern part of New Guinea, but also in the southern, on the Fly River and in Yule Island (D'Albertis).

22. PTILOPUS TEMMINCKI.

I did not made the mistake of calling this species Megaloprepia formosa. My Megaloprepia formosa (Ann. Mus. Civ. Gen. ix. p. 122) (1876) is the bird which Mr. Elliot calls Ptilopus bernsteini. Mr. Elliot might have perceived which was my bird from its habitat; and besides he knew very well that I was well acquainted with P. temmincki, as I suggested to him that this was the proper name for Ptilopus formosus, Gray.

24. PTILOPUS CORONULATUS.

The following important quotation is missing :---

Ptilonopus pulchellus, Wall. (nec Temm.), Ann. & Mag. Nat. Hist. (2) xx. p. 476 (1857), Aru.

This species is confined to the Aru Islands and to the southern part of New Guinea; the localities Salwatty and Sorong, and that of Jobie are wrong, and belong respectively to P. trigeminus and P. geminus. Ansus is not a distinct island, but a locality in the island of Jobie. 1879.]

26. PTILOPUS TRIGEMINUS.

I question whether Mr. Elliot, who says that it may well be doubted if *P. trigeminus* should be separated from *P. geminus*, has ever seen a specimen of *P. trigeminus*. He says that the only difference is in the slightly paler crown. The case is quite the contrary. I have seen one specimen in the British Museum (Wallace's collection), most likely from Sorong, a second from Salwatty in Gould's collection, and many in the Museum of Leiden. They differ from *P. geminus* in the brighter crown, in the paler throat, in the saffron-colour round the violet spot of the abdomen being much reduced, and in the yellow of the lower part of the abdomen being less extended. In fact, as regards the pale violet crown, *P. trigeminus* is intermediate between *P. coronulatus* with a bright violet crown, and *P. geminus* with a pinkish, nearly white crown.

27. PTILOPUS IOZONUS.

The habitat of this species is the Aru Islands and south of New Guinea.

29. PTILOPUS JOBIENSIS.

The synonymy given is not exact; Mr. Rowley and I used the binomial name, and not a trinomial name like Schlegel.

This species, rather than approaching P. humeralis, is allied to P. iozonus, of which it is the northern representative. P. humeralis differs from both in the deep purple band on the small wing-coverts, whereas these both in P. jobiensis and P. iozonus are grey-violet; P. jobiensis differs from P. jozonus in having the tail above uniform green; in P. iozonus the tail has a very conspicuous apical grey band.

P. jobiensis lately has been found also in Tarawai or D'Urville Island (Atti R. Ac. Sc. Tor. xiii. p. 321).

31. PTILOPUS NANUS.

This species has been obtained by D'Albertis on the Fly River (Ann. Mus. Civ. Gen. ix. p. 43); and I think that it is confined to the south of New Guinea and Mysol.

32. PTILOPUS MONACHUS.

Mr. Elliot says that the birds from Ternate differ from those of Gilolo, and that the Gilolo bird may require separation. Mr. Gray in his 'Hand-list' had already mentioned that the specimens from Gilolo belong to a variety. I may say that I have seen many specimens from both localities, and that I have not been able to detect any real difference.

34. PTILOPUS MELANOCEPHALUS.

The locality Sula-bessie does not belong to this form, but to P. chrysorrhous.

I cannot offer any additional remark on the specimens from Flores (*P. melanauchen*, Salvad.); but I think that they belong to a form equivalent to *P. melanocephalus*, *P. melanospilus*, and *P. chrysor-rhous*.

38. PTILOPUS PORPHYREUS.

This is not a Moluccan nor a Papuan species; still I may mention that, to avoid the confusion with *Columba porphyracea*, Temm. (1822), it would be better to call it *P. roseicollis*, Wagl. Besides Java it inhabits also Sumatra, as has been stated by Bonaparte. I have seen many skins from Sumatra, collected by Dr. Beccari.

42. PTILOPUS ORNATUS.

The authority of Laglaize for this species being found on Mount Arfak is not correct, as Mr. Laglaize was never there. Mr. Laglaize's specimens, which I have seen, are from Amberbaki, a locality far away from Mount Arfak.

44. PTILOPUS PERLATUS.

The locality Aru Islands does not belong to this species, but to P. zonurus. The two are representative forms, one living in Northern New Guinea, Jobie, and Salwatty, and the other in the Aru Islands and in the south of New Guinea, on the Fly River, where D'Albertis has lately collected several specimens entirely agreeing with those from the Aru Islands.

45. PTILOPUS ZONURUS.

Mr. Elliot could have added many quotations to the synonymy of this species; all the references to *P. perlatus* from the Aru Islands belong to it.

Beside the type, I have seen many specimens of this form from the Aru Islands and from the Fly River; and all of them show the grey band at the tip of the upper surface of the tail. *P. zonurus* has in that respect the same relation to *P. perlatus* that *P. iozonus* has to *P. jobiensis*. It is important to notice that *P. perlatus* and *P. jobiensis* are respectively the northern representative forms of *P. zonurus* and *P. iozonus*. Mr. Elliot's statement that *P. zonurus* is barely distinguishable from *P. perlatus* is rather inconsistent, after he has accepted as distinct *P. jobiensis* and *P. iozonus*, which differ exactly in the same particulars as *P. zonurus* from *P. perlatus*.

47. PTILOPUS PECTORALIS.

The synonymy of this species is not correct. Instead of Columba virens, Less. Voy. Coq. descr. \mathcal{Q} [sic], it ought to be Columba cyanovirens, Less. Voy. Coq. Zool. i. 2, p. 713 (1828). The name of C. cyanovirens was given to the female of P. superbus and to the present species! It is important to notice the mistake, as, if Lesson had really named this species C. virens, this name would have had priority over that of C. pectoralis, Wagl. Isis, 1829, p. 739. From the localities Mr. Elliot has left out Koffiao (Beccari).

48. PTILOPUS VIRIDIS.

S. Müller and many others after him have said that this species is also found in New Guinea, near Lobo. But this is a mistake which has arisen from S. Müller having (Verh. Land- en Volkenk. p. 22) given the name of *Columba viridis* to a young specimen of *P. pectoralis*. 49. PTILOPUS GEELVINKIANUS.

I do not think that the name used by Mr. Elliot is the proper one. The exact and full synonymy of this species stands as follows :----

Ptilopus viridis, stirps geelvinkiana, Schleg. N. T. D. iv. p. 23 (1871).

Ptilopus musschenbroeki, Rosenb. in litt. (Schlegel, l. c.).

Ptilopus viridis geelvinkianus, Schleg. Mus. P. B. Columbæ, p. 23 (1823).

Ptilonopus musschenbroeki, Beccari, Ann. Mus. Civ. Gen. vii. p. 715 (1875).

Ptilopus musschenbroeki, Salvad. Ann. Mus. Civ. Gen. ix. p. 195, sp. 3 (1876); Rowley, Orn. Miscell. iii. pl. (1878).

Ptilopus geelvinkianus, Elliot, P. Z. S. 1878, p. 560, p. 49.

From the above synonymy it appears that the first name given to this species by Prof. Schlegel can not be used, being a trinomial one; and as at the same time he published that of *P. musschenbroeki*, Rosenb., this is the one which Mr. Elliot ought to have used, instead of making a binomial one of his own.

51. PTILOPUS RIVOLII.

I also have examined the type of P. solomonensis, Gray, and quite agree with Mr. Elliot in referring it to P. rivolii \mathcal{Q} . If I remember rightly, I wrote on the label of the typical specimen that such was my opinion.

52. PTILOPUS PRASINORRHOUS.

To the localities registered by Mr. Elliot must be added the following, already mentioned by me-Gagie, Guebeh, Dammar, Mafor.

As to *P. prasinorrhous* being different from *P. rivolii*, I do not think there can be the least doubt, although some specimens have the under tail-coverts more or less yellow, and even entirely yellow, but of much paler hue than in *P. rivolii*.

53. PTILOPUS STROPHIUM.

Mr. Elliot unites P. miqueli, Rosenb., with P. strophium, Gould. The latter is based on a specimen, collected by Macgillivray during the voyage of the 'Rattlesnake' in Duchateau Island, one of the Louisiade group, beyond the south-eastern extremity of New Guinea. _*P*. miqueli is founded on specimens from Jobie and the small island of Miosnom, very near the west coast of Jobie, in Geelvink Bay. In Miosuom P. miqueli is very common; Dr. Beccari has collected many specimens there. In no other place intermediate to those mentioned have P. strophium or P. miqueli been found. That in such far-away and limited localities the same bird should be found, and not in the very wide intervening tract, is a thing which very few will be disposed to believe; and, besides, the two birds are, according to my views, really different. When I was in London last year I took with me two specimens of P. miqueli to compare with the type of P. strophium, and found that the latter differs in having the anterior Proc. Zool. Soc.—1879, No. V. 5

[Jan. 14,

half of the crown rosy red, the green feathers of the upper parts dusty greyish, as if they were powdered, and the under tail-coverts of a light yellow. *P. miqueli* has the auterior part of the crown purplish red, the feathers of the upper parts of a pure, not dusty-greyish green, and the under tail-coverts of a brighter yellow. Mr. Elliot believes that the type specimen of *P. strophium* is faded upon the forehead; but he has overlooked that the figure of the same, published in Jardine's 'Contributions to Ornithology' when the bird was newly brought to London, shows the same rosy colour of the crown as it now has after twenty-eight years.

The second specimen named *P. strophium* in the British Museum, which was bought from M. Verreaux, without any locality, has the forehead purplish red, and certainly belongs to *P. miqueli*.

54. PTILOPUS BELLUS.

Although this species has the pectoral band yellow and white, like *P. speciosus*, I do not think that this is its *nearest ally*, but rather *P. prasinorrhous*, in which sometimes the white pectoral band is more or less tinged with light yellow. Besides that, *P. speciosus*, unlike any other species, instead of having the crown purple, has only two purple spots in front of the eyes, and the abdomen of a beautiful lilac.

56. PTILOPUS JOHANNIS.

Certainly this bird has its nearest ally in *P. speciosus*, having the abdomen lilac; but, unlike any other species, it has the breast-band all vellow, and the top of the head lilac like the abdomen.

59. PTILOPUS PUELLA.

70. PTILOPUS ASSIMILIS.

71. PTILOPUS MAGNIFICUS.

I must state that, notwithstanding the contrary opinion of Mr. Elliot, I think that these species, and a fourth lately discriminated by me, should be referred to a distinct genus from *Ptilopus*, *i. e.* to *Megaloprepia*, Rchb., the type of which is *Columba magnifica*, Temm.

If Reichenbach included in the same genus *Ptilopus perlatus*, Temm., which certainly does not belong to it, that is not a good reason for completely discarding the genus, which, according to me, is perfectly recognizable by the rather long tail of the birds, the uniform colour of the same, the first primary not attenuated, and the peculiar colonring of the different members. It is not by taking these characters separately, but combined as they are, that the generic value of the group appears evident.

Then Mr. Elliot seriously questions if the three races mentioned should be continued as distinct species. To maintain this he begins by saying that "they only differ in size," which is not exact; and the proof of this we have from Mr. Elliot himself, who a few lines below says:—"The specimens of the smallest race, called *P. puella*, which are found in the island of Jobie and also at Mount Epa, in the south of New Guinea, have the under surface of the tail lighter

in colour than those from other localities, being blackish-grey, instead of blackish-brown." But Mr. Elliot disposes very easily of this difference, saying, "this, however, cannot be considered of any specific importance." But the truth is, that, guided by the black colour of the under surface of the tail, any one can pick up a true Megaloprepia puella among hundreds of the other forms.

Mr. Elliot, as the *habitat* of *P. puella*, besides Mysol, Salwatty, Waigiou, Ghemien, and Dorey, enumerates also Cape York, Jobie, and New Ireland, which are wrong or doubtful. As to Cape York, this locality is given on the authority of Mr. Ramsay; but I doubt whether Mr. Ramsay has ever had the opportunity of comparing a specimen from the northern peninsula of New Guinea with the supposed M. puella from Cape York; and I even doubt whether Mr. Ramsay is acquainted with the difference in the under surface of the tail between the true M. puella and M. assimilis. Even Mr. Elliot did not know the difference, as he asked me how I could distinguish M. puella from M. assimilis except by size! Most likely Mr. Ramsay's M. puella is a small, not full-grown M. assimilis. The fact to be shown is that the form with the under surface of the tail black lives at Cape York. For my own part, I am not disposed to believe it without additional proofs, as all such birds I have seen (and many they are) were from the northern peninsula of New Gninea, from Waigiou, Ghemien, Salwatty, and Batanta. All the birds from Jobi and the south of New Guinea (Mount Epa and Fly River) have the under face of the tail dark greyish; and these I have lately named Megaloprepia poliura, which would be the eastern and southern form representative of M. puella. There is an apparently strong objection against this view. A specimen in the Museum of Paris, marked New Ireland, which I have also seen, has the under surface of the tail black. But are we sure that the locality is exact? The bird was collected by Lesson and Garnot during the voyage of the 'Coquille;' and it would not be the first instance of a wrong locality given to a bird collected by them.

In a recent paper, where I have described M. poliura, I have given what I think satisfactory characters for discriminating the four forms allied to M. magnifica; the principal differences can be tabulated as follows :----

1. Cauda informe grisea.

a. Major: long.tot.circa 0^m·420-0^m·400, al.0^m·240-

c. Minor : long. tot. circa $0^{m} \cdot 330$, al. $0^{m} \cdot 175 - 0^{m} \cdot 170$ 3. M. poliura.

2. Cauda inferne nigra : long. tot. 0^m·330, al. 0^m·170 4. M. puella.

The four forms mentioned above occupy different areas:-

Megaloprepia puella inhabits the northern peninsula of New Guinea, with the islands of Waigheu, Guebeh, Batanta, Salwatty, and Mysol.

M. poliura has been found hitherto only in the island of Jobie and in the south of New Guinea (Hall Bay and Fly River).

5*

M. assimilis inhabits Cape York, and according to Mr. Ramsay also Rockingham Bay, where, always according to the same Mr. Ramsay it meets

M. magnifica, which is generally known to inhabit South Australia and the river Hunter to Moreton Bay.

Turin, Zoolog. Museum, Nov. 19, 1878.

 Contributions to the Ornithology of the Philippines.— No. XII. On the Collection made by Mr. A. H. Everett in the island of Basilan. By ARTHUR, Marquis of TWEEDDALE, F.R.S., President of the Society.

[Received November 26, 1878.]

In the year 1876, the island of Basilan was for the first time visited by an ornithological collector, Dr. Steere, who, during the fortnight he resided at the Spanish settlement of Isabella, obtained examples of 23 species of birds. Mr. Everett reached the same island in the month of May of the present year, and remained there during June. Of the collection of birds he formed it is now proposed to give an account.

In all Mr. Everett obtained representatives of 56 species. Of these 12 only have already been enumerated by Mr. Sharpe; so that through Mr. Everett's exertions I am enabled to increase the number of known Basilan birds by 48. To the 56 species collected by Mr. Everett must be added the 11 obtained over and above by Dr. Steere; and the known total of Basilan birds will thus be found to be 67.

By the discovery of *Totanus calidris* in Basilan, Mr. Everett has established one certain Philippine habitat for a species hitherto but doubtfully known to inhabit the archipelago. So now only 28 species are left, the occurrence of which in the Philippines still remains somewhat uncertain.

Mr. Everett writes, that he finds the "wet season at its height, and the rain has been incessant. The hostility of the natives renders it impossible to go beyond a radius of four or five miles from the village without a well-armed party. Hence the collection is rather meagre. Apart from these causes, however, the collection is likely to prove disappointing; for the avifauna of the island does not seem to offer any very marked features to distinguish it from that of the Zamboanga peninsula."

1. PRIONITURUS DISCURUS (2). [Basilan, J Q, May, June.]

2. TANYGNATHUS LUCONENSIS (3). [Basilan, J, May.]

3. LORICULUS HARTLAUBI (7). [Basilan, J, Mav.]